DETERMINANTS OF INDONESIAN SMALL MEDIUM ENTERPRISES' PROFITABILITY (A STUDY ON EAST JAVA REGION)

Written by:

INDRA RACHMADITYA

NIM. 135020307121008

MINOR THESIS

Prerequisite for Completing the Undergraduate Program in Accounting

INTERNATIONAL UNDERGRADUATE PROGRAM IN ACCOUNTING

DEPARTMENT OF ACCOUNTING

FACULTY OF ECONOMICS AND BUSINESS

BRAWIJAYA UNIVERSITY

MALANG

2018

STATEMENT OF ORIGINALITY

Name : Indra Rachmaditya

Student ID : 135020307121008

Faculty : Economics and Business

Program : International Undergraduate Program in Accounting

Minor Thesis Entitled

DETERMINANTS OF INDONESIA SMALL MEDIUM ENTERPRISES' PROFITABILITY (A STUDY ON EAST JAVA REGION)

This is to certify that to the best of my knowledge, the content of this minor thesis is my own work. No part of this minor thesis has been published or submitted for publication. I certify that the intellectual content of this minor thesis is the product of my own work and that all the assistance received in preparing this minor thesis and sources have been acknowledged. I declare that this is a true copy of my minor thesis. including any final revision, as approved by minor thesis committee and the Graduate Studies Office and that this minor thesis has not been submitted for a higher degree to any other University or Institution.

If my statement is proven to be incorrect, I agree to accept existing academic sanctions. This statement was made under full awareness and consciousness, to be use when necessary.

Malang, October 17th, 2018

Researcher,

METERAI TEMPEL
58E8FAFF516724624
6000
ENAM RIBU RUPIAH

Indra Rachmaditya
13502030712100

LEMBAR PENGESAHAN

Skripsi dengan judul,

DETERMINAN PROFITABILITAS USAHA KECIL DAN MENENGAH DI INDONESIA (STUDI KASUS DI JAWA TIMUR)

Yang disusun oleh,

Nama : Indra Rachmaditya

NIM : 135020307121008

Fakultas : Ekonomi dan Bisnis

Jurusan : S1 Akuntansi Program Internasional

Telah dipertahankan di depan dewan penguji pada tanggal l Desember 2018 dan dinyatakan memenuhi syarat untuk diterima

BOARD OF EXAMINERS

1. Yeney Widya Prihatiningtias, SE., Ak., MSA., DBA.

   NIP. 198001162005022001

   (Dosen Pembimbing) ....

2. Prof. Eko Ganis Sukoharsono, SE., M.Com.Hons., Ph.D.

   NIP. 196412032003121001

   (Dosen Penguji I) ....

3. Putu Prima Wulandari, SE., MSA., Ak.

   NIP. 2011068702152001

   (Dosen Penguji II) ....

Malang, 18 Desember 2018

Ketua Program S1 Akuntansi

Dr. Endang Mardiati, Ak.,

NIP. 19590902198601200

ACKNOWLEDGMENTS

First of all, I would like to address my gratitute to the one and only God, Almighty Allah Subhanahu Wa Ta'ala, to let me finish my minor thesis. This research aims to give understanding on the impact of accounting on Indonesian SME's profitability. I realize that the success of this research also depends on other's supports. For this reason, this is an opportunity let me express my gratitude to:

- My father, my mother, my sister and my little brother who give me mental and financial support,
- Mrs. Yeney Widya Prihatiningtias, SE., Ak., MSA., DBA. as my research advisor,
- Staffs on International Office in Brawijaya University,
- My lecturers in Brawijaya University and Middle Tennessee State University,
- Mrs. Weni and Mr. Tantra who help me a lot to finish my research
- Other people who cannot be named one by one, but have given much help in completing this report

Finally, I hope the existence of this research can give contributions for literature and future research. Aamiin.

Malang, October 17^{th}, 2018

Indra Rachmaditya

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

1.1 Research Background

Small-medium enterprises (SMEs) play vital role in developing and developed countries. In Indonesia, particularly, SMEs become the main pillar of Indonesia's economy as employment provider. In addition, they also play major role in the development of local economy and give a contribution towards improvement of non-oil and gas export (Urata, 2000). Indeed, the researchers and economists found that SMEs serve as engines of growth and development (Neagu, 2016). In addition, Tambunan (2011) argues that SMEs are capable of reducing income inequality mainly in developing countries. According to Department of Industry and Commerce (2002), in average, the growth of SMEs in Indonesia is about 11% per year creating many positive impacts one of which is increasing employment and reducing income inequality. Moreover, according to National Statistics Center (2016), from the total citizens of 252 million, 7.8 million of them are non-agriculture entrepreneurs or 3.1 percent out of total population. Hence, the total of entrepreneurs in Indonesia has reached two percent from total populations as a minimum requirement for prosperous society.

The importance of small-medium enterprises (SMEs) in Indonesia is proven when there was multi-dimension crisis in 1998. In that kind of situation, SMEs was the only which can survive, if not growing (Departemen Koperasi, 2008), while bigger businesses were collapse due to the crisis. It is because big businesses are influenced heavily on the increase in raw material price, installments costs due to the drastic increase in Rupiah exchange towards Dollar. Based on this evidence, SMEs can be the solution for robust economic system as it is able to improve the market competitiveness, and create stable economy (Departemen Koperasi, 2008).

National Statistics Center (2001) made a survey on SMEs in Indonesia especially industry in 2001 and it found out that the problems faced by Indonesia SMEs are lack of capital, marketing, and technological matters. Although the government has already made a program to help SMEs financially in the form of credit schemes, still the majority of SMEs are not able to fulfill the requirements of it. As a consequence, SMEs relied their financial matter on themselves, personal funding, money from relatives, and credit from informal lenders for financing their daily business operations (Tambunan, 2011).

According to Tambunan (2011), there was only a small percentage of SMEs in Indonesia which have gotten credit from banks or financial institutions and this at the same time shows the condition of Indonesia's underdeveloped financial markets and institutions in the country. This phenomenon disrupts the supply of capital to SMEs. Moreover, lack of competitiveness in SME's financing sector means that banks or financial institutions are not driven enough to make a breakthrough program that triggers the growth of SME market (The Asia Foundation (TAF), 2001). Although Bank Rakyat Indonesia is successful in providing micro enterprises in terms of microfinance, this program is not suitable for the majority of SMEs due to their size difference to micro enterprises (TAF, 2011). Accordingly, it is a pity that, according to Tambunan (2011), there are high percentage of SMEs in Indonesia which have the potential to become nationally or even internationally competitive enterprise are prone to forfeit their sustainability which leads to bankruptcy due to the lack of financial support as they are alone in maintaining profitability or positive cash flow.

In terms of marketing concern, most SMEs still rely heavily on their existing partners to market their products. Insufficient resources with respect to capital and human resources to explore their target markets are the cause of lack of marketing (Tambunan, 2011). Therefore, due to the unreliable marketing strategy, SMEs are lack of exposure of their products to their potential customers which leads to inconsiderable amount of sales.

Another research by Ediraras (2010) found that most of SME's problems in Indonesia are related to marketing, the quality of human resources, and capital. Nevertheless, the crucial abandoned problems faced by SMEs in Indonesia are accounting and managing finances.

The effect of neglecting accounting and managing finance may not be tangible as other factors, yet without the accounting and financial management effective practices, the success of SMEs will not be sustained and leads to bankruptcy (Ediraras, 2010). Therefore, it is important for entrepreneurs to implement accounting or financial management carefully. Leastwise, entrepreneurs can calculate profit and loss and better can understand profit and loss of their business.

According to Tambunan (2009), it is still common that SMEs in Indonesia are dominated by self-employment enterprises without hiring paid workers. In rural area, for instance, most of traditional enterprises are characterized by low levels of productivity, poor quality products, serving small local market, and unassisted by technological tools. Few of them are economically viable over the long term, but majority of them are not. Nevertheless, the existence of this type of enterprise can be seen as an early stage of entrepreneurship development (Tambunan, 2009).

Young Entrepreneurs Association of East Java (HIPMI Jatim) is selected to become the respondents of this study. There are several reasons in selecting this community as respondents in order to have more representative data depicts Indonesian entrepreneurs which are: 1) The entrepreneurs have various field of business from agriculture, technology, creative entrepreneurship, real-estate and etc;

2) East Java is specifically chosen over Central branch due to the multiple sources of cities of entrepreneur's background. From Surabaya, Malang, Sidoarjo, Trenggalek, and other cities in East Java; 3) East Java is considered to be more representative of the characteristics of big city entrepreneurs and small rural areas like Trenggalek; 4) Most of the business in this community are small and medium instead of micro enterprises which aligned with our target of respondents.

In terms of selecting the proper business' size, it is arguably more appropriate to choose small and medium size of enterprises instead of including the micro size of enterprises. It is common that micro size enterprises have an indifferent primary intention as SMEs which is maximizing the profitability but has to be considered that majority of micro enterprises struggle to survive in daily basis operations and they implement accounting and sophisticated system by themselves (Berry et al., 2001). In terms of stability, micro enterprises usually have unreliable fixed schedule on running the business on daily basis; therefore, an unreliable finding comes as a consequence. Moreover, SMEs perform better than micro enterprises (MIEs) in generating more employment. The SME's potential growth may expand significantly (similar to large enterprises), while majority of MIEs tend to grow little and hence do not exceed that size category (Liedholm and Mead, 1999). Accordingly, SMEs in Indonesia is defined by Indonesian Constitution no. 20 in 2008. It is stated as follow:

Figure 1.1 Indonesian SME's definition

	Assets (Rp)	Gross Profit (Rp)
Small Enterprises	>50 Million – 500 Million	>300 Million – 2,5 Billion
Medium Enterprises	>500 Million – 10 Billion	>2,5 Billion – 50 Billion

Source: Constitution no. 20 in 2008 or UU No. 20 Tahun 2008

A research by Minnis and Sutherland (2017) implied that the indicator of success is measured by their success in ability to acquire customers based on feedback and good service. In this research, we measure the business success by measuring the profitability which means the business venture's ability to obtain and maintain positive cash flow from operations after being deducted by material and overhead costs as well as employees' salaries for three consecutive periods. Nonetheless, to manage the cash, SMEs attempt to minimize debt, maximize the use of technology, and keep track of cash flow (Nguyen, 2017). Other challenges that small business owners have are staying debt-free, adjusting their strategies with the market changes, and conserving cash and expenses.

The connection between accounting and business success has been only guessed rather than described by empirical evidence. It is argued by Burchell et al (1980) that the relationship between accounting information and decision making rarely has been examined critically and its connection has been only presumed rather than empirically proven. For instance, Alle and Yohn (2009) and Cassar (2009) provide insight into small business/start-up ventures' decisions to prepare financial statements and document the benefit of financial statements for accessing credit and reducing cost of credit. Minnis (2011) found that firms with audited financial statements have a lower cost of debt due to the trust of the lenders from audited financial statements when determining interest rates. Furthermore, studies conducted by Minnis and Sutherland (2017) also argued that financial statements is requested by commercial lenders as a tool of monitoring mechanism. Despite of these prior research provide insights particularly related to the capital market and monitoring benefits of accounting, it is remained a few insights that document the overall benefit of accounting to the profitability of SMEs.

Given our primary interest, whether accounting matters to SMEs business venture profitability is still an open question. On the one hand, profitable business operators often propagandize that an understanding of accounting is in line to business success (Buffet, 2003). Another consistent notion, accounting textbooks also indicate business success has benefited from accounting knowledge and financial reports. More specifically, managerial accounting textbook often delineate that successful planning, controlling, and decision making within an operation is the results from accounting framework (Horngren et al., 2015; Garrison et al., 2017). From this perspective, it can be concluded that the better understanding of utilizing accounting reports should provide entrepreneurs with better decision making and discipline that will lead to more profitable outcomes.

Given the primary interest of this research is whether accounting matter for the profitability of SMEs, accounting attributes are examined in several ways. According to Miller et al (2018), in particular, we examine whether the likelihood that SMEs results in a profitable firm is associated with whether the entrepreneur has an accounting background (i.e., taken courses in accounting/finance, have accounting/finance college degree or work experience in accounting/finance), whether the entrepreneur creates financial statements and financial projections, whether the entrepreneur hires accountant/bookkeeper to manage finances or prepare financial statements and implementation of AIS towards business.

Despite the importance of entrepreneur's focus on accounting, it is arguably that entrepreneurs have limited time and resources. Therefore, an entrepreneur focuses his/her time and resources on preparing and using financial statements can potentially alleviate the focus on other tasks that are critical to the operational success of a business venture (e.g., marketing or supply chain management) and might be too rigid and formal in business planning (Child, 1974).

Another experimental evidence research by Vera-Munoz (1998) exhibited that decision making ability to incorporate factors (e.g., opportunity costs into their business decision making) may potentially inferred by high level of accounting level of an entrepreneur. Additionally, due to the high level of accounting knowledge, entrepreneur views accounting as a compliance exercise that can affect their business decision making process (Miller, 2018). In spite of these contrary findings, the researcher predicts that a better understanding of accounting and preparation of financial statements and financial projections leads to higher probability of business venture's profitability.

Miller et al. (2018) argued that hiring a professional accountant/bookkeeper) to prepare financial statements or manage finance of the business should lead to more appropriate decision making due to the availability of useful financial information interpreted by accountant. Additionally, better decision making (Bonner, 1999) and more accurate projections (Cassar, 2010) can be made easier due to the presence of accountant. Therefore, the researcher argues that hiring accountant or bookkeeper can lead to business' profitability.

Accounting Information Systems (AIS) is a tool which, when incorporated into the field of Information and Technology systems (IT), is utilized to help in the management and control of business related to economic-financial area. Rather recently, the rapid development of technology has created more of possibility of generating and using accounting information for strategic viewpoint (Grande et al., 2011) instead of as 'numbers'. It is arguably that small-medium enterprises (SMEs) have higher urgency to implement AIS to deal with higher degree of uncertainty in the competitive market (El Louadi, 1998). Grande et al. (2011) argues that AIS have created a better use of their accounting system in their relations with suppliers and customers in the same way the development of the electronic banking allows the businesses to reduce time lagging in their transactions, moreover AIS have fastened tax management.

Previous research suggests that the success of a business venture is associated with prior venture and work experience (Gompers et al., 2010; Hopp and Sonderegger, 2014), motivation (Hechavarria et al., 2012) and variation of experiences within the entrepreneurial team (Thiess et al., 2016). Other studies focus on the factors why start-ups are vulnerable to failure for numerous reasons, such as the lack of entrepreneurial experience and inability to adopt a business strategy (Corderiro, 2013; Franca, de Aragao Gomes, Machado, & Russo, 2014; Mutoko, 2014). Some also fail due to lack of access to sufficient resources, fail to assess business risks, poor personnel management and materials, and offer low-quality products and services (Corderiro, 2013; Miles, 2013; Mutoko, 2014; Williams, 2014). In this research, we focus on whether entrepreneurs that have an accounting background, preparation of financial statements and financial projections, hiring accountant/bookkeeper, and implementation of accounting information system (AIS) affect Indonesian SME's profitability. Profitability, by its mean is defined as the ability of the SMEs to obtain and maintain positive cash flow from operations after being deducted by material and overhead costs as well as employees' salaries for three consecutive periods (Miller et al., 2018).

Additionally, a research by Miller et al. (2018) examined the relationship between accounting and the profitability of start-up venture. The research explores accounting as entrepreneur's accounting background, preparation of financial statements and financial projections, and hiring of accountant. In addition, this research adds one more accounting component which is the implementation of accounting information system (AIS) related to Indonesian SME's profitability. Due to the outstanding advance in technology, using AIS can benefit SMEs from a strategic viewpoint (Grande et al., 2011). A research describes its importance that not having AIS is the cause of most SMEs continuous low performance (Muhindo et al., 2014). Other than that, the implementation of AIS to SME's profitability is still insufficiently addressed. The only research that discussed specifically implementation of AIS to SME's profitability is conducted by Grande et al. (2011) and Muhindo et al. (2014). Several studies only discuss the potential IT contribution, in general, to SME's productivity resulting in inconsistent results (Scapens and Jazayeri, 2003; Scapens et al., 1998; Cramm, 2008). Thus, in this research, the researcher incorporates the accounting components from several studies affecting SME's profitability.

This research mainly provides findings related to the lack of studies that discuss the fundamental question between accounting and SMEs' profitability in Indonesian case. Therefore, it will be interesting to find out whether there is a correlation between accounting and Indonesian SMEs' profitability despite little research on this topic. Thus, we believe with this broad-based examination, it allows us to not only document the importance of accounting for business profitability, but also inform which accounting instruments are associated with profitable business ventures. At the same time, it is really useful for Indonesian SMEs to apply to their business ventures as well as add to the literature on usefulness on accounting for SMEs decision making and factors that improve entrepreneurial success.

1.2 Research Questions

As described previously, there been very few number of researches investigating the connection between accounting and the SME's profitability. A vast literature has already examined that accounting plays important role in terms of the efficiency in capital market outcomes. However, there is only little researches that focus on the efforts of accounting in improving the likelihood of business success. It is generally known that accounting should include accounting proper knowledge or experience, to create financial report (e.g. income statement, financial projections), employ professional accountants/bookkeeper and implementation of AIS. Meanwhile business profitability is defined as positive cash flow from operations. Thus, it is crucial to discover the relationship between both factors by providing empirical evidence rather than only been presumed. Given the issues, the research question of this research are:

1) Does entrepreneur's accounting background positively affect the profitability of Indonesian small-medium enterprises (SMEs)?

2) Does preparation of financial statements and projections positively affect the profitability of Indonesian small-medium enterprises (SMEs)?

3) Does hiring accountant/bookkeeper positively affect the profitability of Indonesian small-medium enterprises (SMEs)?

4) Does implementation of accounting information system positively affect the profitability of Indonesian small-medium enterprises (SMEs)?

1.3 Research Objective

The objective of this research is to analyze whether entrepreneur's accounting background, preparation of financial statements and financial projections, hiring accountant, and implementation of accounting information system positively impact the profitability of Indonesian small-medium enterprises (SMEs).

1.4 Research Contributions

This research is expected to be able to give meaningful contributions both theoretically and practically. The details are as follows:

1. Theoretical Contribution

This research contributes in terms of enhancing and corroborating the previous finding, suggesting the relationship between accounting and SME's profitability. More importantly, it adds empirical evidence regarding the link between accounting and SME's profitability.

The current research adds specifically on resource-based theory (RBT) in terms of accounting resources and breakdowns into four components which are entrepreneur's accounting background, preparation of financial statements and financial projections, hiring accountant or bookkeeper, and implementation of accounting information system (AIS). Also, this research will add a value by giving which specific accounting elements are useful for decision making on factors that improve SME success.

2. Practical Contribution

This research would also benefit the entrepreneur who just started their business or ongoing business by showing the determinants that increase the likelihood of SME's profitability connects to entrepreneur's accounting background, intention to use accounting system, hiring accountant or bookkeeper and implementation of AIS. The results should be directly practiced by entrepreneurs to increase their business' profitability.

1.5 Research Outlines

The research is organized as follows. Chapter 2 presents the theoretical framework, literature review, and hypothesis development. In subsequent to that, chapter 3 explains the research design or research methods utilized by this research. Meanwhile, chapter 4 discusses the quantitative findings of this research. Ultimately, chapter 5 denotes the conclusions including the implication of findings and limitations of the research as well as recommendations or suggestions for further research.

CHAPTER 2

LITERATURE REVIEW

2.1. Resource-Based Theory

The resource-based theory was emerged as a result the frustration with the structure-conduct-performance paradigm of the industrial organization theory (IOT) of the firm (Bain, 1959; Porter, 1980). The IOT explains that a business' success is entirely determined by its external environment. Therefore, to counter the industrial-organization theory (IOT), resource-based theory (RBT) is built and explains that in order to achieve business success, internal resources and competencies plays a major role of its success (Werner-felt, 1984; Dierickx and Cool, 1989; Prahalad and Hamel, 1990). In RBT, competitive advantage is rooted inside the firm including assets that are valuable and inimitable. A firm's capabilities or competencies to utilize these assets to produce superior performance determine competitive advantage (Grant, 1991). In addition to that, Barney (1986) pinpointed that by bringing external environment into resource-based picture, it leads the firm's resource become valuable. In other words, contrary to the IOT, external resource alone cannot lead to valuable resources. By combining them, specifically nurturing and exploiting internal competencies and applying them to an appropriate external environment, a business can develop a viable strategy.

The resource-based theory (RBT) is used to determine the strategic resources in order to maximize the potential of delivering comparative advantage to the firm. By exploiting these resources, a firm can potentially achieve sustainable competitive advantage which leads to higher likelihood to achieve and to maintain profitability of the firm. In the article of “Firm Resources and Sustained Competitive Advantage” is considered as critical work related to RBT (Barney, 1991). Also, RBT proposes that firms are diverse, therefore, they possess heterogeneous resources. It means that firms can have different strategies due to their various resources mixes.

The RBT focuses attention on a firm’s internal resources as a means of organizing processes and obtaining a competitive advantage. The resources hold potential as sources of sustainable competitive advantage, they should be valuable, rare, imperfectly imitable and not substitutable (Barney, 2011). The RBT suggests that organizations must develop unique, firm specific core competencies that will allow them to outperform competitors by doing things differently (Hamel, 2012). Although the literature presents many different ideas around the concept of the resource-based perspective, at its heart, the common theme is that the firm's resources are financial, legal, human, organizational, informational and relational; resources are heterogeneous and imperfectly mobile and that management's key task is to understand and organize resources for sustainable competitive advantage as a way to achieve and maintain profitability (Makadok, 2001).

The RBT focuses on managerial attention on the firm’s internal resources by identifying assets, capabilities, and competencies within in order to deliver superior competitive advantage. Furthermore, RBT views resources in three categories which are tangible, intangible, and personnel-based (Grant, 1991). Tangible resources include financial reserve and physical resources such as plant, equipment, and raw materials inventory. Intangible resources include reputation and technology. While personnel-based resources include human resources as well as the culture, the training and expertise of employees, and their commitment and loyalty. Specifically, personnel-based resources' abilities to assemble, integrate, and manage these bundles of resources is crucial for the firm, take into account that these resources are not productive on their own (Grant, 1991).

The RBT illuminates that not all resources are equal important, nor possess the potential to become a source of sustainable competitive advantage (Fahi and Smithee, 1999). Its sustainability of the firm is relied so much on the extent to which resources can imitated or substituted (Lowson, 2000). Furthermore, Barney (2011) pointed out that understanding the causal relationship between the sources of advantage and successful strategies is difficult in practice. Hence, management's effort to identify, understand, classify core competencies is playing a critical role. Furthermore, management must invest in organization learning to develop, nurture, and maintain key resources and competencies (Barney, 1991).

Since the resources can be utilized and exploited properly, selecting a viable strategy to create competitive position while at the same time combine with external opportunities (Day, 1994). More specifically, internal resources have to fulfill these criteria in order to create optimal benefits for the firm including valuable, rare, imperfectly imitable, and non-substitutable. The term valuable means the resources improve firm's efficiency and effectiveness. The term rare means not available to other competitors. The term imperfectly imitable means it not easily implemented by others. Finally, the term non-substitutable means that it is not able to be replaced by some other common resources. In other words, it is usually called as VRIN criteria (Prahalad and Hamel, 1990).

2.2 Small-Medium Enterprises (SMEs) in Indonesia (East Java Region)

SME plays an important role in developed and developing countries in terms of economic development. In developed country and New Industrial Countries (NICs), SMEs give a significant contribution towards increased of export and as a subcontractor which provides input for big scale business while at the same time it plays a role as innovation sources. A slight different impact occurs in developing countries, while SMEs is tied to be one of the solutions to tackle economic and social problems such as reducing unemployment, poverty, and income inequality. In the case of Indonesia, SMEs are able to help government to reduce imbalance due to uneven development which occurs between cities and rural areas (Sulistyastuti, 2004). Although the role of SMEs is slightly different with respect to developed and developing countries, various empirical studies give a credit of SME's existence.

Small Medium Enterprise (SME) is an independent business which have a small portion of market share and commonly managed by its owner or part-owners. Actually, there are wide diversity of the businesses, so there is no single definition of a SME as each country has its own definitions for SME. According to OECD SME and Entrepreneurship Outlook (2005), in European Union, SMEs are non-subsidiary, independent firms which have characteristics such as the given numbers of employees. Whereas, the limitation numbers of employee are various across countries. In the United States, SMEs can be defined as a firm that has maximum 500 employees while other countries limit at 200 employees. Based on Indonesian Constitution no. 20 in 2008, Indonesian SMEs are classified by their assets and gross profit per year. Specifically, small enterprises have assets (excluding land) range from 50 million – 500 million in Rupiah, while medium enterprises range from 500 million – 10 billion in Rupiah. With respect to gross profit per year, small enterprises have the limit from 300 million to 2.5 billion in Rupiah, whereas medium enterprises' gross profit per year range from 2.5 billion to 50 billion in Rupiah.

State Ministry of Cooperatives and Small-Medium Enterprises (SMEs) of Indonesia stated that SME plays an important role to the economic development of the country. In terms of GDP, until 2012, SMEs reached more than 50% of the Indonesia's GDP. In addition, SMEs also are successful in providing employment in Indonesia while at the same time helping government to address unemployment problem which specifically more than 95% of Indonesian migrant workers are working for SMEs. SMEs also become the backbone of reducing poverty, in 2013, while Indonesia had a poverty gap index rising from 1.75% to 1.89% and the poverty severity index rose from 0.43% to 0.48% (National Statistics Center, 2014). According to Irjayanti et al. (2016), there are 56 million SMEs in Indonesia which able to employ up to 15 million people annually. It is not surprising that SMEs are becoming the foundation of Indonesian economy. Consider that SMEs in Indonesia grows rapidly, it reached 6% per year and constantly increased after the economic crisis in 1998.

Despite their growth, Indonesian SMEs are still facing various problems to optimally manage their business. Although the Indonesian government has created various programs to strengthen Indonesian SMEs, based on data from growing Wholesale Private Banking in Indonesia, from total SMEs, there is only 36% SMEs have bank accounts. This indicates that Indonesian SMEs are lack of access of financing schemes. In addition, they mostly rely on personal and family capital (Irjayanti et al., 2016) or informal external financing (Tambunan, 2011) for daily business operations. In fact, to maximize business development, SMEs should take the facilities of financing by creating a partnership with bank or financial institutions. Also, the ability to conduct financial management and the ability to compete (Irjayanti et al., 2016) leads business success.

Most SMEs are not registered as corporate bodies but as sole proprietorship or in Indonesian case are Trading Business (UD) and Limited Partnership (CV), as the registration procedures quite simple and a bit easier than the other forms of business registration. Hence, SMEs has outnumbered all the other forms of business and can be found almost everywhere across the country (Amoako, 2013). Ironically, a research by Boachie et al. (2005) showed that 60% of the SMEs are not able to sustain their first five years of operations.

2.3 Accounting

Accounting has a lot of benefits for SMEs one of which is to receive financing from bank or financial institutions. SMEs must provide reliable information before financial institutions decide whether or not to invest or finance in business. Bank, for example, need to know whether SMEs are able to pay the principal amount and interest rates before granting the facility (Amoako, 2013). If SMEs have the desire to grow significantly, it is unavoidable that external financing is a mandatory step to be taken. Investors decision whether to invest or not depends on the quality of SME accounting records. It is reasonable for investor to analyze SME's financial accounting information in order to reduce risk (Amoako, 2013). A research by Tagoe et al. (2001) emphasized that inadequate accounting system is the primary factor in small business failures.

Copeland and Dascher (1978) described that in the process of planning for profit, financial information is designed in a way that can help judgment and decision making. In addition to that, Amoako (2013) also argued that accounting is one of the most effective decision tools of management. The various business transactions which provided in a way that easier to be interpreted from accounting information gives an aid to management in operating the business.

According to Ediraras (2010), accounting is the key factor to gauge business performance. The accounting information provided in accounting records is useful for decision making in order to improve the business management. That information helps the SMEs to identify and to predict which areas of business which problems might arise by making a correct decision in the right time.

Without those, the problem which originally avoided or solved becomes the cause of the loss or even bankruptcy. Ediraras (2010) argued without effective accounting method, the business which initially has a big potential of success can go bankrupt.

A research by Biryabarema (1998) found that the significance of accounting practice to help SME to have accurate information to make a proper decision. Sales or purchase projections, break-even analysis, and other financial analyses are examples of accounting information. The research also implied that lack of proper accounting practice leads to emerge a significant issue for business success.

A high incidence of failure among SMEs is caused by the poor accounting systems used by enterprises (Ofonagoro, 1983). The research emphasized that since accounting plays an important role in determining business growth and profitability, it is a mandatory for enterprises to evaluate the accounting systems used by SMEs. Since accounting can help enterprises to denote the volume of sales, profit (or loss), assets and liabilities at any given time.

The quality of SME's accounting information has a positive correlation with business' performance and survival (Lybaert, 1998). More specifically, it is a need for SMEs to provide financial information due to the volatility with respect to the situation such as unstable cash and profit positions, and reliance on short-term borrowing (McMahon & Holmes, 1991; Dodge, Fullerton & Robbins, 1994).

2.4 Entrepreneur's Accounting Background

A research by Miller et al. (2018) documented that entrepreneur's accounting background which is defined as whom taken a course in accounting/finance or had work experience in accounting/finance or had accounting/finance education background can positively affect the likelihood of business achieving and maintain profitability. The research emphasized that entrepreneurs who have accounting knowledge are more likely to use their skill to understand the financial reports.

A similar research conducted by Hoitash et al. (2016) found that CFOs with accounting backgrounds are more likely to have conservative point of view. When applied to our setting, it is possible that entrepreneurs with an accounting background also have high likelihood of becoming more conservative with respect to accounting practice. Therefore, they will take less risky projects which leads to higher chance of achieving and maintaining profitability. Moreover, entrepreneurs who have accounting background are more likely to organize and consolidate accounting information for making business decisions (Bushman and Smith, 2001). While the ability of gather, summarize, and analyze accounting information increase the likelihood of better decision making (Meigs and Meigs, 1993).

With respect to our primary interest to examine whether accounting positively affects the profitability of SMEs, specifically in entrepreneurs' accounting background, the researcher defined this on whether the entrepreneur has taken at least a course/seminar/training in accounting/finance, work experience in accounting/finance or have a college degree related to accounting/finance. Millet et al. (2018) documented that the entrepreneur having an accounting background is one of the critical factors to increase the likelihood of business achiement and maintaining profitability.

2.5 Preparation of Financial Statements and Financial Projections

It is argued by Burchell et al (1980) that the relationship between accounting information and decision making rarely has been examined critically and its connection has been only presumed rather than empirically proven. For instance, Alle and Yohn (2009) and Cassar (2009) provide insight into SME ventures' decisions to prepare financial statements and financial projections to document the benefit for accessing credit and reducing cost of credit.

A research by Minnis (2011) found that firms with audited financial statements have a lower cost of debt due to the trust of the lenders from audited financial statements when determining interest rates. Furthermore, studies conducted by Minnis and Sutherland (2017) also argued that financial statements is requested by commercial lenders as a tool of monitoring mechanism. Other studies found that accounting information improves the organization and consolidation for decision making (Meigs and Meigs, 1993; Bonner, 1999) which leads to increased business performance through channels (Bushman and Smith, 2001). First, accounting information, if interpreted carefully and thoroughly, is able to exhibit whether a particular investment opportunity is good or not. Second, financial reporting is able to track the resources and prevent fraud. Third, financial reporting should reduce adverse selection costs.

While, historical information in the form of financial statements aid in distinguishing between good and bad investment opportunities, financial projections may provide even stronger benefits in this regard (Miller et al., 2018). For example, preparing sales or expenses process and the process of considering fixed as well as variable costs should provide critical insights with respect to business' key cost drivers and the key determinants of success or failure. Therefore, the research emphasized that forecasts should improve planning and decision making for business venture which leads to higher likelihood business achieves profitability (Miller et al., 2018).

2.6 Hiring Accountant or Bookkeeper

The hiring of accountant/bookkeeper initiated by entrepreneurs to prepare financial statements or managing finance is beneficial for decision making (Bonner, 1999) and more accurate projections (Cassar, 2010). By employing the aid of a professional accountant or bookkeeper, the financial statements are likely to provide a more accurate depiction of the business' economic situation. Ultimately, the financial statements are made to be a better basis for entrepreneurial decision making.

It is arguably that the case of SMEs require external support from external accountants due to the lack of in-house expertise (Bennertt and Robson, 2005; Collis and Jarvis, 2002). An external accountant gives business advices that can summarize a range of competencies that support the SME's intangible resources, providing a potential source of competitive advantage (Gooderham et al., 2004). Commonly, when the gap is found between SME's existing internal resources and the resources required to achieve business objectives (Johnson et al., 2007), external support is needed. The small enterprises usually have the greatest gap between those (Deakins et al., 2001; Jennings and Beaver, 1997).

2.7 Accounting Information System (AIS)

The purpose of implementing accounting information system (AIS) is to collect and store data related to transactions to produce specific financial reporting for decision making. Accounting Information System (AIS) processes the economic events or transactions from day to day operations that are divided into two main types, external and internal transactions. External transactions emerge from exchange with the outside world such as purchasing or selling goods, while internal transactions emerge from accumulation of the cost data and assignment of the costs of production (Muhindo et al., 2014). Accounting Information System (AIS) are a tool which, when incorporated into the field of Information and Technology systems (IT), were utilized to help in the management and control of business related to economic-financial area.

Rather recently, the rapid development of technology has created more of possibility of generating and using accounting information for strategic viewpoint (Grande et al., 2011) instead of just 'numbers'. The research argues that AIS has created a better use of its accounting system in its relations with suppliers and customers in the same way the development of the electronic banking allows the businesses to reduce time lagging in their transactions, moreover AIS have fastened tax management.

In short, AIS is a system/software used to record the financial transaction of a business or organization. This system incorporates the methodologies, controls and accounting techniques with IT industry: user interface, computers and sophisticated software. Therefore, AIS software, more specifically, can track transactions which includes internal reporting data, external reporting data, financial statements, and trend analysis capabilities (Grande et al., 2011). According to Muhindo et al. (2014), AIS refers to the comprehensive collection of business transactions from inputs, gathering and reporting of financial transactions information. In other words, AIS put together the related components of accounting cycles from collecting information, raw data and transform them into financial data for the purpose of reporting them to decision makers (Soudani, 2012).

Moreover, Grande et al. (2011) suggested that an optimal use of AIS by SMEs can help adaptation process more successful to a changing environment and increase the competitiveness of business, while at same time enhancing the dynamic character of business. In other words, there are improvements in administrative management regarding accountancy and finance. Consequently, regarding the benefits of implementing AIS can lead to business success.

2.8 The Profitability of Small-Medium Enterprises (SMEs)

In this research, business profitability is defined as the ability of Indonesian SMEs to achieve and maintain positive cash flow from business day-to-day operations (Miller et al., 2018) after being deducted by material and overhead costs as well as employees' salaries for three consecutive periods. The profitability of SMEs can determine the sustainability and ongoing business venture. There is a high incidence of business failure, according to the US Bureau of Labor Statistics Business Employment Dynamics (2015. However, more than 650,000 businesses were established during the year and these businesses created over three million jobs. Ironically, the statistics exhibited that less than half of the new businesses survive for more than five years.

Miller et al. (2018) examined specifically on how accounting can affect business' profitability. Profitability of SMEs is influenced by working capital management (Tran et al., 2016), accounting (Miller et al., 2018), the ability to compete in the marketplace (Anton et al., 2015), implementation of accounting information systems (Grande et al., 2011; Muhindo et al., 2014), and innovation (Hamdani and Irawan, 2012). Moreover, A research by Minnis and Sutherland (2017) implied that the indicator of success is measured by the success in ability to acquire customers based on feedback and good service. Miller at al., (2018) specifically argued that business profitability is affected by entrepreneur's knowledge on accounting and whether the business preparing the financial statements and financial projections. Also, prior research suggested that the success of SMEs which has correlation with profitability is tied to prior business venture and work experience (Gompers et al., 2010; Hopp and Sonderegger, 2014), motivation (Hechavarria et al., 2012), and the various backgrounds and experiences had within the entrepreneurial team (Thiess et al., 2016).

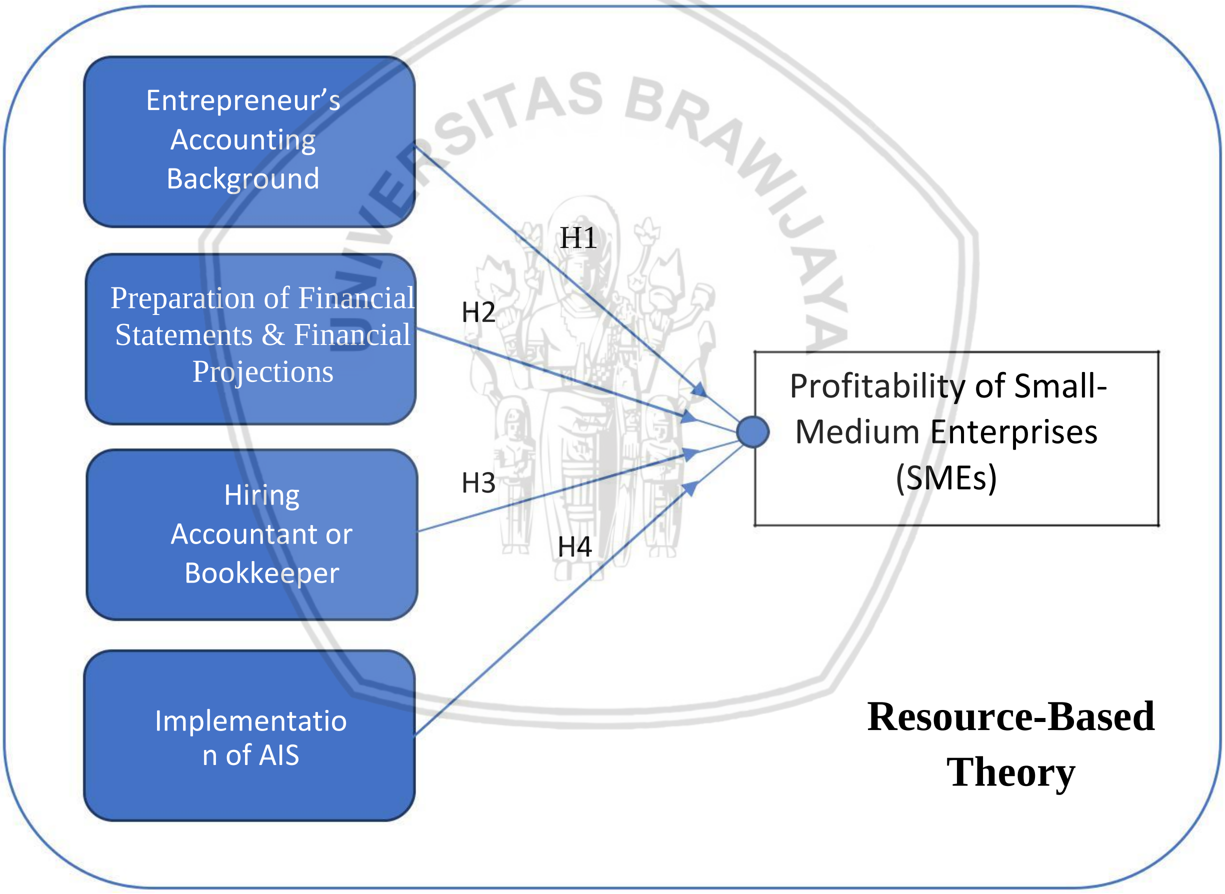
2.9. Theoretical Framework and Hypothesis Development

In short, the relationship between accounting and profitability of Indonesian SMEs is summarized in the following figure below. The theory that underlies the relationship is Resource-Based Theory (RBT). Based on RBT, proper utilization and exploitation of internal resources leads to a firm in achieving competitive advantage which eventually increases the likelihood of gaining and maintaining profitability. In this research, a firm is specifically interpreted as Indonesian SMEs.

Based on the theory applied, this research model focuses on accounting affecting profitability of Indonesian SMEs. In this research, accounting is elaborated in four components which consist of entrepreneur's accounting background, preparation of financial statements and financial projections, hiring accountant/bookkeeper, and implementation of accounting information system (AIS). While the profitability of Indonesian SMEs is defined as the capability of Indonesian SMEs to achieve positive cash flow from operations after being deducted by material and overhead costs as well as employees' salaries for three consecutive periods.

Interestingly, the relationship between accounting and profitability of SMEs is not always be positive but might also be negative as accounting may potentially be used as compliance exercise by entrepreneurs or preparing financial statements can distract entrepreneurs from other critical tasks such as marketing (Miller et al., 2018) which likely to fail attaining profitability. Therefore, the following figure incorporates four accounting elements that influence profitability of Indonesian SMEs and Resource-Based Theory as a foundation.

Figure 2.1 Theoretical Framework



2.9.1 The Relationship Between *Entrepreneur's Accounting Background* and SME's Profitability

In the Resource-Based Theory (RBT), resources are classified into three categories which are physical assets or tangible resources, human resources, and intangible resources. Thus, *entrepreneur's accounting background* is classified as human resources based on RBT. Human resources which include organizational capabilities, culture, commitment, and capabilities for integration and communication is essential for the SME to increase the likelihood of achieving profitability. Special skill and distinct knowledge possessed by entrepreneur especially in accounting or finance field can make a significant contribution to the SME's profitability. It is found the evidence by Miller et al. (2018) that entrepreneurs who have taken courses in accounting or work experience in accounting are more likely increase their business' profitability due to their knowledge.

The accounting steps from planning, bookkeeping, journaling, and reporting are usually made by knowledgeable personnel. Entrepreneurs who have accounting background are more likely to know how to prepare financial statements appropriately. Appropriate financial statements are used as a foundation to make business decision making. Moreover, it can the entrepreneur to make viable business strategies which more likely to increase business performance and resulting in profitable business venture.

The researcher's first hypothesis predicts the relationship between entrepreneur's accounting background on profitability of Indonesian SMEs.

Nevertheless, most prior research focuses on the benefits of financial expertise on monitoring instead of business' profitability. For instance, DeFond et al., (2005) found evidence that audit committee member that has accounting financial expertise will more likely to get positive response from the market. Similarly, Gore et al. (2011) found that CFOs of the firm providing a stronger oversight on a firm financial policies and strategies. Consistent with that, Hoitash et al. (2016) found that CFOs with accounting background are more conservative in related to financial matters. When applied to our setting, it is possible that entrepreneurs with an accounting background will also take on lower risk and familiar project resulting in a safe environment and more likely to maintaining profitability. From these studies, the researcher can conclude that financial expertise is beneficial in terms of firm monitoring but does not necessarily provide insights into the value of an accounting background on overall business success.

Another research by Bushman and Smith (2001) revealed that accounting information should improve the consolidation of firm information and better decision making. The researcher predicts, if applied in the researcher's setting, the entrepreneurs with an accounting background are better able to consolidate information for making better business decision. Furthermore, Meigs and Meigs (1993) also emphasized that accounting is used to gather, summarize, and analyse information for successful managerial decision making.

On the other hand, a few studies suggest that financial expertise may not always be an advantage for business success. Minton et al. (2014) found that financial expertise has a lower performance during the financial crisis. In addition to that, accounting knowledge may not always lead to better decision making. In particular, Vera-Munoz (1998) found that high accounting knowledge actually interrupts entrepreneur's ability to incorporate opportunity costs into business decision. Albeit of these contrary findings, the researcher hypothesizes that entrepreneurs with accounting background leads to business success. This leads to the first hypothesis which is:

H1: Entrepreneur's accounting background positively affects SME's profitability

2.9.2 The Relationship Between *Preparation of Financial Statements & Financial Projections* and SME's Profitability

Preparation of financial statements and financial projections is considerably essential to help entrepreneur knowing the financial condition of the business. Resource-Based Theory categorizes financial statements as tangible resources. Tangible resources include plant, equipment, raw materials, and skills. While financial statement is included in skills that entrepreneur decision to make. Financial statements consist of income statement, cash flow statement, and balance sheet. While financial projections consist of sales forecast, cost of capital analysis, and break-even analysis. Preparing one of them can potentially increase the awareness of entrepreneur to better manage their business. Income statement, for instance, can help entrepreneur to decide what kind of primary and secondary sources of income so that they can make priority in order to maximize profit. Most SMEs in Indonesia do not prepare financial statements due to the absence of policy that obligate them. In this research, financial statements and financial projections can be a ‘secret weapon’ of entrepreneur to be a step forward to maximize business profitability.

Preparation of financial statements and financial projections are useful for entrepreneurs to make business decision making. Planning, bookkeeping, journaling and finally reporting are the necessary accounting steps to make financial statements. For instance, statement of cash flow can aid the entrepreneur to know the current situation of the business related to the cash. By understanding the financial statements properly, entrepreneur can maximize this resources by making viable business strategies and turn the business venture into more profitable.

The second hypothesis predicts that the preparation of financial statements more likely improves the profitability of Indonesian SMEs. Previous studies examine the relationship preparation of audited financial statements on small business but focuses on the implications for accessing credit and the cost of credit. For instance, Alle and Yohn (2009) stated that small business that create financial statements and financial projections is increasing the firm’s access to credit. Another research by Minnis (2011) found that firms that have audited financial statements have a lower cost of debt due to its credibility and the lenders rely on audited financial statements when determining interest rates. Furthermore, financial statements are used by commercial lenders as a monitoring mechanism (Minnis and Sutherland, 2018). While these studies focus on whether the preparation of financial statements and financial projections in monitoring and access to credit. Thus, this research focusses on whether financial statements can improve business profitability.

Financial statements can help firm in terms of consolidating firm information for decision making in three ways. First, financial statements should help managers differentiate between good and bad investment opportunities. Second, financial statements should lead to better governance and eventually guide resources to good projects and prevent waste of resources. Third, financial statements can reduce unnecessary costs (Bushman and Smith, 2011). While financial projections may provide more insights in terms of differentiating good and bad investment opportunities. Thus, the process of forecasting future sales or future expenses and the process of considering fixed versus variable costs should provide insights in terms of business' key cost drivers and the key determinants of success or failure. Therefore, these information lead to better decision making and increase the likelihood of business to achieve profitability (Miller et al., 2018).

On the contrary, it is well known that entrepreneurs have limited time and resources, while some argue that financial statements can possibly interrupt from other critical tasks related to operational success of a business such as marketing or supply chain management (Miller et al., 2018). Also, Cassar (2010) found that entrepreneurs who prepare financial statements and financial projections are more likely to appear too much optimism in their expectations. This indicates that entrepreneurs who make financial statements and financial projections, tend to make worse business decision and be less likely to achieve profit. Despite these contrary findings, the researcher predicts that there is a positive relationship between preparation of financial statements and financial projections on SME's profitability. This leads to the second hypothesis which is:

H2: Preparation of financial statements and financial projections positively affects SME's profitability

2.9.3 The Relationship Between *Hiring Accountant/Bookkeeper* and SME's Profitability

Based on Resource-Based Theory (RBT), distinctive information is one of the internal resources that improves competitive advantage which eventually leads to business profitability. *Hiring accountant/bookkeeper* is recognized as an additional internal resource that provides useful information for SME. Therefore, based on RBT, *hiring accountant/bookkeeper* can be categorized as human resources advantage from the point of view of the accountant itself or as intangible resources advantage from the point of view of its benefits earned by the business venture. It is rare among the SMEs to hire accountant/bookkeeper; therefore, financial statements can lead to distinctive benefits that no other SMEs would even be considering the importance. By carefully hiring accountant/bookkeeper to manage finance or preparing financial statements, at least the entrepreneur can determine which key factor can improve business success and culprit of business failure.

Accountant/bookkeeper can aid the entrepreneur from managing finance, planning, bookkeeping, journaling, and reporting to make viable business strategies. Although the making of financial statement is made by accountant/bookkeeper, the decision making is still in the hand of entrepreneur. More importantly, preparation of financial statements without understanding its contents resulting in compliance exercise for entrepreneur and distract them from other vital activities like marketing and supply chain management, therefore, the presence of accountant/bookkeeper is a bridge towards improving business performance.

In the third hypothesis, the researcher predicts that hiring accountant/bookkeeper to manage finance should increase the likelihood of business achieving and maintaining profitability. Managing finance includes preparing financial statements or giving advices in financial matters. Bonner (1999) argued that professional accountants and implementation of sophisticated financial statements lead to better decision making and more accurate projections (Cassar, 2010). Furthermore, by hiring accountant/bookkeeper, the information provided will depict business economic situation and provide a better basis for business decision making. A SME that uses business advice and accounting services from external accountant/bookkeeper demonstrate superior performance (Carey, 2015).

Some contrary studies found that hiring accountant/bookkeeper to manage finance suggest that the entrepreneurs will see it as a compliance exercise instead of as a tool for making better decision making (Millet et al., 2018). Despite these disadvantages, hiring accountant/bookkeeper to manage or prepare financial statements or giving advices on financial matters will increase the likelihood of business achieving and maintaining profitability. This leads to the third hypothesis which is:

H3: Hiring accountant or bookkeeper positively affects SME's profitability

2.9.4 The Relationship Between *Implementation of AIS* and SME's Profitability

The implementation of accounting information system (AIS) is a tool to help management to control topics related to firms' economic-financial area. According to Grande et al. (2011), *implementation of AIS* benefits for the firm in terms of better adaption to a changing environment, better management and a high degree of competitiveness which is in line with Resource-Based Theory (RBT) by exploiting internal resources to achieve competitive advantage. Implementation of AIS can be categorized as intangible resources advantage which includes technology. In fact, a lot of SMEs in Indonesia do not even think about implementing AIS, whereas several third parties have provided AIS with low-cost or even free such as MYOB and Quickbooks. The awareness of the usage of AIS alone will guide the entrepreneur to make better decision making, notably that AIS consolidates various accounting information that eventually lead to business success.

Finally, the researcher argues that the implementation of accounting information system should lead to higher likelihood of the small-medium enterprises (SMEs) to be successful. According to Grande et al. (2011), it is found that there is a positive relationship among the SMEs that use AIS for fiscal and bank management and better performance measures. Also, the investment in technology can help the SME to promote information and communication in different areas of the organization such as production, design, innovation, marketing, commercial management, or after sales service because all of them are very directly identified with gaining or losing profitability or market share.

According to El Louadi (1998), the implementation of accounting information system is more important for small-medium sized ones which need to deal with a higher degree of uncertainty in the competitive market from a strategic viewpoint. Therefore, the need to improve the systems and data processing capacity is mandatory to match the information needs in competitive market (Van de Ven and Drazin, 1985). Furthermore, Grande et al. (2011) pinpointed that increasing the investment in AIS will be the main advantage to achieve a stronger, more flexible corporate culture to face continual changes in the environment. A research by Cramm (2008) found that there is a direct positive relationship between IT contribution including AIS to increase SME productivity which eventually to increase SME profitability.

Nevertheless, the investment in specific technology is related to performance and productivity is still open question due to its insufficient analyses for instance, which specific technology investment is still defined yet. Studies have been made by many researchers regarding the AIS contribution generally in increasing SME productivity. Although this lack of studies related to AIS leads to SME profitability, the researcher believes that AIS can help in terms of SME's profitability. Therefore, the final hypothesis will be:

H4: The implementation of accounting information system (AIS) positively affects SME's profitability.

CHAPTER 3

RESEARCH METHOD

3.1 Introduction

This research uses quantitative method which examines the relationship between variables. According to Creswell (2014), a quantitative research is defined as an approach conducted by researcher(s) to test theories by examining the relationships among the predetermined variables experienced by particular populations. He added that the variables can operationalized and measured, in order to be analyzed using statistical tools, which eventually the researcher(s) can draw conclusions from the result of the statistical analysis. Furthermore, the predetermined variables used in this research are built upon and corroborated by the defined concepts, a theory, past studies, and hypothesis which have been described and elaborated in the literature review.

With regards to this research's statistical tool, the software is used to answer and formulate conclusions on the research question is SPSS version 22. This research replicates the research methods of the previous studies covering the proxies employed for the dependent and independent variables and the statistical tools used for examining the relationship between the variables as described in the next section. In addition, the explanation related to the sample selection, data collection, statistical model and data analysis method is provided in the next sections.

3.2 Population and Samples

The term population is defined as the whole group of people, events, or things of interest that the researcher(s) attempt to be inquired (Sekaran and Bougie, 2013). Meanwhile, the term sample is defined as subset of population (Sekaran and Bougie, 2013). In this research, the population and samples are the entrepreneur members in *Himpunan Pengusaha Muda Indonesia* (HIPMI) East Java region. The total population of HIPMI East Java reaches approximately 105 members.

Firstly, the rationale of choosing HIPMI East Java region is due to its diversity of business sectors. From the point of view of business sectors, it is known that HIPMI has various business fields including infrastructure and property; maritime, agribusiness and agroindustry; commerce, industrialization and state-owned corporation; natural resources, mineral energy and living environment; as well as creative economy, health and telecommunication. Therefore, due to its business diversity, the researcher assumes that this organization is representative enough in representing Indonesian SMEs with respect to which accounting resources should be implemented to increase the likelihood of achieving SME's profitability.

Secondly, HIPMI is dominated by small-medium sized enterprises (SMEs) instead of micro sized enterprises (MIEs) although few of them have already been categorized as large enterprises. Due to its dominance of SMEs, the population of is line with the researcher designed criteria to fulfill the purpose of the research. For instance, hiring accountant/bookkeeper is more likely to be implemented by

SMEs which focuses on growing the business instead of MIEs still focuses on survival value of the business. Another supporting evidence is that several members of HIPMI are continuing their family business for years, which can be roughly concluded that those business are categorized as small-medium sized enterprises (SMEs).

Finally, with respect to selection of its region in East Java, the researcher finds that East Java region is the second biggest network in Indonesia after Central branch, considering that each city has its community, the researcher chooses East Java to ease him in obtaining various channel to be the representative of wider area.

In selecting a subset or samples from the population, the researcher applies several criteria or judgment before determining the samples that will be used. This type of sampling method where the samples are chosen based on several criteria and adjusted for the research purpose is called Purposive Sampling Method (Sekaran and Bougie, 2013). Accordingly, these are the criteria designed by the researcher:

1. The entrepreneurs surveyed must be one of the main personnel of the business (CEO, CFO, and other major roles) and have invested their capital in the business.
2. The firm must be operating in Indonesia. Otherwise, it will be excluded.

3. According to *UU No. 20 tahun 2008,* SME should have assets (Rp) worth 50 million to 10 billion and gross profit (Rp) worth 300 million to 50 billion per year.

Therefore, the data that do not fulfill the above criteria will be excluded from the samples as their lack of incompatibility of required data will preclude the statistical analysis and findings in line with the research purpose.

3.3 Data Collection: Type and Sources of Data

This research uses primary data as the main source of data. The primary data is gathered through deployment of questionnaire towards HIPMI East Java region members. According to Sekaran and Bougie (2013), primary data refers to which information is obtained through first-hand by the researcher on the variables of interest for the specific purpose of the research. In this research, the data are collected by administering questionnaires. The questionnaires are distributed through personal and electronic questionnaires. The distribution through personal is conducted in HIPMI HalalBihalal event in July 2018. The questionnaires are administered approximately 200 members of HIPMI East Java. To anticipate the lower expectation of attendance, electronic questionnaire is used. Some prizes like vouchers and gifts are offered to increase the response rate both through personal and electronic questionnaires.

3.4 Operational Definition and Measurement of Variables

The current research has several variables that will be used by researcher to analyse or examine whether there is a relationship between. The set of variables being used in this research consistsing of independent and dependent variables. These variables are adopted from the combination of previous studies that address similar research topic such as accounting and business profitability. The descriptions regarding the variables are provided in the next subsections

3.4.1 Independent Variable

According to Sekaran and Bougie (2013), the term independent variable is defined as the influence variable that gives an effect on the dependent variable in positive or negative way. In this research, the independent variable refers to accounting which has four elements which consist of entrepreneur's accounting background, preparation of financial statements, hiring accountant/bookkeeper, and implementation of accounting information system (AIS). The measurements of each variables will be explained further in the next paragraphs.

1. *Entrepreneur's Accounting Background*

The entrepreneurs with accounting background is elaborated in terms of their work experience in accounting/finance, or taking a training/seminar in related to accounting/finance, or having accounting/finance education background (Miller et al., 2018). Accordingly, it equals to value of 1 if the entrepreneur has any work experience in accounting/finance, or if the entrepreneur has taken a training/seminar/course at least one or more in accounting/finance fields, or if the entrepreneur has accounting/finance education background. The value of 1 is assigned when one or more of the criteria is satisfied. Otherwise, failing to satisfy the criteria will be assigned with a value of 0 (Miller et al., 2018).

2. *Preparation of Financial Statements and Financial Projections*

The preparation of financial statements can be brokendown into two categories which are financial statements and financial projections. In terms of financial statements, there are three resources which consist of cash-flow statement, income statement, and balance sheet. Also, financial projections have three resources which consist of break-even analysis, cost of capital analysis, and sales forecast. Preparing any financial statements or financial projections is more likely leads to business success (Miller et al., 2018). Recently, in January 2018, *SAK-EMKM (Standar Akuntansi Keuangan Entitas Mikro Kecil dan Menengah)* is launched by *Ikatan Akuntan Indonesia (IAI)* which regulates the usage for whom and the contents in terms of minimum requirements. The *SAK EMKM* is designed for micro, small, and medium entities which its characteristics have explained above based on *UU No. 20 tahun 2008.* In terms of the contents, *SAK EMKM* (2018) requires balance sheet, income statement, and notes of financial statements as minimum standards. In terms of period, *SAK EMKM* (2018) requires preparation of balance sheet at the end of the year period in continuous fashion and income statement for each period of the business, while it can be a semester, monthly, or weekly depending on the type of the business.

According to SAK EMKM (2018), the entrepreneur has to meet the criteria of preparation of both income statement and balance sheet as a minimum requirement. Therefore, the gauge is divided into two clusters, with respect to relevancy/awareness and frequency. In association with relevancy/awareness, it equals to value of 1 if the entrepreneur prepares the balance sheet and income statement with any frequency. Otherwise, it equals to value of 0 if the preparation of both balance sheet and income statement is not made. Concerning with frequency, it equals to value of 4 if any financial statements or financial projections is prepared every month. While the value of 3 means the preparation of any financial statements or financial projections is made every three months, the value of 2 if the preparation of any financial statements or financial projections is made every six months and the value of 1 if the preparation of any financial statements or financial projections is made once a year. Finally, it equals to 0 if the preparation of any financial statements or financial projections has never been made (Miller et al., 2018).

3 *Hiring Accountant/Bookkeeper*

Hiring accountant/bookkeeper means the business venture hand the financial management or preparation of financial statements to the accountant/bookkeeper (Miller et al., 2018; Carey. 2015). An indicator variable equals to 1 if the financial management or preparation of financial statements is managed by accountant/bookkeeper. Other than that, the indicator variable equals to 0 (Miller et al., 2018).

4. *Implementation of Accounting Information System*

Accounting information systems refers to the usage of software that collects business components including entire inputs, gathering, and reporting of financial transaction information (Muhindo et al., 2014). Also, it refers to the level of which accounting information systems had taken place in the form of accounting software or applications (Grande et al., 2011). In terms of implementation of accounting information system (AIS), the value of 1 is given if the entrepreneur implements AIS by using accounting software such as MYOB, Krishand, QuickBook, etc other than Microsoft Excel towards his business. The value of 0 (zero) is given when the entrepreneurs do not implement any AIS/not relevant or manually record or simply use Microsoft Excel. Furthermore, the researcher also attempts to measure its sophistication of their AIS which is categorized as integrated and modest. If AIS is implemented in sophisticated way, in other words, integrated the value of 1 is given. On the contrary, if AIS is implemented in simple or manual way, so it is called modest, the value of 0 is given (Grande et al., 2011).

3.4.2 Dependent Variable

According to Sekaran and Bougie (2013), the researcher's main interest is to understand and explanation of dependent variable. The goal of the research is investigating any relationship of other variables towards dependent variable. Usually finding an explanation of dependent variable is connected to the solution of the problem. In this research, the dependent variable is the profitability of Indonesian SMEs which can be represented as positive cash-flow.

The dependent variable used in this research is positive cash flow. The profitability of SMEs means the business venture is able to achieve and maintain positive cash flow from operations throughout the measurement period, where positive cash flow is revenue that covers all expenses and employee salaries (Miller et al., 2018; Tran et al., 2017). In this research, the researcher regards that SME can be called as profitable when it can maintain in three months in a row of positive cash flow. An indicator of variable is equal to 1 if business venture can maintain profitability in three months in a row, while it equals to 0 if business venture is unable to maintain profitability in three months in a row (Miller et al., 2018).

3.5 Data Analysis Method

In analyzing the data, this research uses SPSS version 22. Before conducting hypothesis testing, this research examines the instrument to test its reliability and validity by administering pilot test while the analysis is done using logistic regression analysis for hypothesis testing.

3.5.1 Pilot Test

Pilot test is conducted to test the instrument (or questionnaire) in terms of validity and reliability. The validity test is using Pearson Product Moment, the value of 0.3 or above is the requirement of being determined as valid. While the reliability test is using Cronbach Alpha, the value of 0.6 or above is the requirement of being determined as reliable. The questionnaires are administered to the sample of minimum 30 entrepreneurs who have similar characteristics as the main population which is *HIPMI Jatim*. The sample is taken from the combination member of *HIPMI Surabaya*, *Developer Property Indonesia*, and some colleagues' businesses to test whether the questionnaire is well understood resulting in adequate reliability and validity of the instrument.

3.5.2 Logistic Regression Analysis

The investigation towards the profitability of Indonesian SMEs is conducted through a set of research instruments investigating the profitability of Indonesian SMEs is measured from the assessment of it which is *positive cash flow for three consecutive periods*. The validity of formulated hypotheses is tested by using quantitative data. The collected data hereafter, are analysed by using logistic regression analysis. Similar to multiple linear regression, the relationship among variables describes the function to illuminate correlation between dependent variable (Y) and independent variable (X). According to Ghozali (2001), the steps taken in logistic regression analysis will be: Predetermined initial equation will be:

$$\text{Ln [odds (Indonesian SME's profitability)]} = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

$$\text{Ln} \frac{p}{1-p} = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

The equation can be simplified into :

$$p\ (\text{Indonesian SME's profitability}) = \frac{1}{1 + e^{-(a + B1X1 + B2X2 + B3X3 + B4X4)}}$$

Notes:

p (Indonesian SME's profitability) = the profitability of Indonesian SMEs measured by cash flow from operations

X1 = *Entrepreneur's accounting background*

X2 = *Preparation of financial statements and financial projections*

X3 = *Hiring accountant/bookkeeper*

X4 = *Implementation of AIS*

a = intercept constants

B_1, B_2, B_3, B_4 = regression coefficient

e = exponential figure 2,718

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Research Samples

The objects of this research are the entrepreneurs that affiliate with HIPMI Jatim. The total members of entrepreneurs in HIPMI Jatim is 105. However, the entrepreneurs that can be accessed are only 75 people, while the remaining 23 of them cannot fulfill the minimum criteria so that the data can be accessed from these entrepreneurs are 52 people left. The minimum criteria to be recognized as sample are 1) Entrepreneur has to be the owner or take hold of important role in the business (e.g. finance manager, marketing manager, etc); 2) The business is run in Indonesia; 3) the business has a minimum omzet of 300 million Rupiahs per year. Table 4.1 exhibits the proportion of research objects.

Table 4.1 Research Object Proportion

	Number of Entrepreneurs
Population	105 people
Cannot be accessed	(30 people)
Cannot fulfill requirement as sample	(23 people)
Total of samples	52 people

From 52 samples of entrepreneurs, the data can be gathered as a whole and processed into statistics.

4.2 Descriptive Statistics

In this section, descriptive statistics of independent and dependent variables are elaborated in table 4.2.

Table 4.2 Descriptive Statistics of Independent and Dependent Variables

	Frequency	Percentage (%)
Entrepreneur's Accounting Background		
Does not have any accounting/finance background	14	26,9
Has accounting/finance background	38	73,1
Total	52	100
Preparation of Financial Statements and Financial Projections		
Does not prepare income statement & balance sheet	27	51,9
Prepares income state & balance sheet	25	48,1
Total	52	100
Hiring Accountant/Bookkeeper		
Does not hire any accountant/bookkeeper	24	46,2
Hire accountant/bookkeeper	28	53,8
Total	52	100
Implementation of Accounting Information System		
Implements manually or using Microsoft Excel	27	51,9
Implements sophisticated AIS software	25	48,1
Total	52	100
SME's Profitability		
Cannot maintain positive cash flow 3 periods	16	30,8
Can maintain positive cash flow 3 periods	36	69,2
Total	52	100

On the first independent variable, *entrepreneur's accounting background*, the value of 1 (one) is given if the entrepreneur has at least one of the following criteria: 1) Has worked in the field of accounting/finance; 2) Has attended training/seminar/course in the field of accounting/finance; 3) Has accounting/finance education background (Miller et al., 2018). Otherwise, the value of 0 (zero) is given if the entrepreneur cannot meet any criteria above. The minimum criteria of the second independent variable, *preparation of financial statements and financial projections* is regulated by SAK EMKM (2018) which at least prepares the income statement and balance sheet. In other words, the entrepreneur will be given the value of 1 (one) if meeting the criteria above. Otherwise, the value of 0 (zero) is given.

Hiring accountant/bookkeeper, as the third independent variable is measured when the entrepreneur hires any accountant/bookkeeper to manage finance or to help in preparing financial statements (Miller et al., 2018). If so, then 1 (one) is given, while the decision for not hiring any accountant/bookkeeper will be given 0 (zero). The last independent variable is *implementation of accounting information system*. The implementation of sophisticated accounting information system such as using MYOB, Krishand, Quickbook, etc will fulfill the criteria and it is given 1 (one). On the other hand, implementation of accounting information system manually or only use Microsoft Excel will the opposite and given 0 (zero). The dependent variable, *SME's profitability* (Miller et al., 2018), has to be fulfilled by entrepreneur to get a value of 1 (one). Otherwise, failure in maintaining will be given 0 (zero).

4.3 Hypothesis Testing

The analytical method used in this research is logistic regression analysis with *SME's profitability* (Y) as a dependent variable.

While the independent variables are *entrepreneur's accounting background* (X_1), *preparation of financial statements and financial projections* (X_2), *hiring accountant/bookkeeper* (X_3), and *implementation of accounting information system* (X_4). *Enter* method is executed once in regression towards dependent and independent variables has been chosen simultaneously. The logistic regression analysis is performed using SPSS version 20 (for windows). Hypothesis testing informs the impact of each independent variables individually toward dependent variables into a model. Table 4.3 explains things in a more detailed as follow.

Table 4.3 Logistic Regression Testing Partially

Variables	B	Sig.
Entrepreneur's Accounting Background	-1,824	0,086
Preparation of Financial Statements and Financial Projections	4,351	0,001
Hiring Accountant/Bookkeeper	-1,770	0,359
Implementation of Accounting Information System	0,099	0,538

Based on the hypothesis, the analysis is as follow:

1. The first hypothesis indicates negative impacts *entrepreneur's accounting background* towards *SME's profitability* which is based on negative coefficient value. While the significance level for *entrepreneur's accounting background* is 0,086 ($p \leq 0,05$). Therefore, due to the significance level is greater than 0,05 and negative coefficient value, it can be concluded that there is a negative but not significant impact of *entrepreneur's accounting*

background towards *SME's profitability*. So, the first hypothesis is rejected.

2. The second hypothesis implies the existence of positive impact of *preparation of financial statements and financial projections* towards *SME's profitability*. At the same time, the significance value is 0,001 (p ≤ 0,05). This phenomenon indicates that *preparation of financial statements and financial projections* have significant impact due to its significance value below 0,05 and positive impact due to its positive coefficient value towards *SME's profitability*. Therefore, the second hypothesis is accepted.
3. The third hypothesis of independent variable *hiring accountant/bookkeeper* towards *SME's profitability* shows the significance value of 0,359 (p ≤ 0,05) and negative coefficient value. Based on its significance value which is greater than 0,05 and negative coefficient value, it can be concluded that *hiring accountant/bookkeeper* has negative but not significant impact towards *SME's profitability*. Therefore, the third hypothesis is rejected.
4. The last hypothesis of independent variable *implementation of accounting information system* shows similar results of the first and the third hypothesis. It is implied by the significant value of 0,539 (p ≤ 0,05) which is greater than 0,05 and negative coefficient value. In

conclusion, *implementation of accounting information system* has negative but not significant impact towards *SME's profitability*. So, the fourth hypothesis is rejected.

From the data above, it can be concluded that only one hypothesis is accepted which is *preparation of financial statements and financial projections* towards *SME's profitability*.

4.3.1 Dimension of Preparation of Financial Statements and Financial Projections Towards SME's Profitability

Independent variable *preparation of financial statements and financial projections* consists of 6 (six) dimensions such as *cash-flow statement, balance sheet, income statement, sales forecast, break-even analysis*, and *cost of capital analysis*. To know each impact of dimensions towards *SME's profitability*, the combination of cross-tabulation and logistic regression is conducted partially. Cross=tabulation method aims at ascertaining the impact of preparing (or not) each financial report towards *SME's profitability* implied in percentage. While the logistic regression aims at finding out the significance of each financial report towards *SME's profitability.*

Table 4.4 Dimension Testing of Preparation of Financial Statements and Financial Projections Partially

Dimension	Positive Cash Flow for Three Consecutive Periods (Y)		Sig.
	Maintain	Non-Maintain	
Cash-Flow Statement			0,009
Prepare	79,5%		
Not prepare		61,5%	
Balance Sheet			0,002
Prepare	92,3%		
Not prepare		53,8%	
Income Statement			0,000
Prepare	88,9%		
Not prepare		75%	
Sales Forecast			0,333
Prepare	75%		
Not prepare		37,5%	
Break-Even Analysis			0,233
Prepare	76,9%		
Not prepare		38,5%	
Cost of capital Analysis			0,013
Prepare	83,3%		
Not prepare		50%	

Based on table 4.4, it is concluded that *cash-flow statement, balance sheet, income statement,* and *cost of capital analysis* have a significant impact due to their significance values, respectively 0,009; 0,002; 0,000; 0,013, are below 0,05 (p ≤ 0,05) towards *SME's profitability*. While the other two, *sales forecast* and *break-even analysis*, do not have a significant impact towards *SME's profitability* because their significance values is greater than 0,05.

4.4 Regression Model

Regression model from statistical analysis is exhibited on table 4.5.

Table 4.5 Logistic regression coefficient value

	B	S.E.	Exp (B)
Step 1[a]			
Entrepreneur's Accounting Background (X_1)	-1,824	1,061	0,161
Preparation of Financial Statement and Financial Projections (X_2)	4,351	1,295	77,573
Hiring Accountant/Bookkeeper (X_3)	-1,770	0,936	0,170
Implementation of Accounting Information System (X_4)	0,099	0,875	1,104
Constant	1,833	1,071	6,250

Based on table 4.5, the logistic regression equation (Peng et al., 2000) will be:

$$\text{Probability: Ln } \frac{Y}{1-Y} = (\alpha + \beta 1X_1 + \beta 2X_2 + \beta 3X_3 + \beta 3X_3 + \beta 4X_4)$$

$$\text{Ln } \frac{Y}{1-Y} = (1.833 - 1.824X_1 + 4.351X_2 - 1.770X_3 - 0.099X_4)$$

The logistic regression equation above means the probability of entrepreneurs to maintain or not maintain *SME's profitability* can be calculated in this equation. The probability value of entrepreneurs to maintain or not maintain *SME's profitability* is between 0 and 1. If the value gravitates towards 1, the bigger the probability of entrepreneurs maintain *SME's profitability*. Meanwhile, if the value is close to 0, the smaller the probability of entrepreneurs maintain *SME's profitability*.

In addition, the meanings of logistic regression coefficient values are as follows:

1. Logistic regression coefficient value of *entrepreneur's accounting background* (X_1) is -1,824 means if the other independent variables are constant while the entrepreneur has accounting background, then the probability of entrepreneur to *maintain SME's profitability* becomes lower due to its negative value. Negative value of regression coefficient implies inverse relationship between X_1 and Y.
2. P*reparation of financial statements and financial projections variable (*X_2) results is 4,351 in its logistic regression coefficient value. It means that when the other independent variables are constant, while the entrepreneur prepares for at least balance sheet and income statement, the probability of entrepreneur *maintains SME's profitability*

becomes higher due to its positive coefficient value and have in-line relationship between X_2 and Y.

3. The negative logistic regression coefficient value is also found in *hiring accountant/bookkeeper* (X3) variable with the value of -1,770. It defines that if the other independent variables are constant while the entrepreneur hires accountant/bookkeeper to manage finance or to help prepare financial reports, the probability of entrepreneur *maintains SME's profitability* becomes lower due to its negative sign. It also implies the inverse relationship between X_3 and Y.
4. The fourth independent variable, *implementation of accounting information system* (X_4) results is -0,099 which means that if the other independent variables are constant while the entrepreneur implements sophisticated accounting information system (e.g. using MYOB, Krishand, Quickbooks), then the probability of entrepreneur to *maintain SME's profitability* becomes lower. The negative sign indicates inverse relationship between X_4 and Y.

4.5 *Odd Ratio* Value

In the equation above, the *odd ratio* value is represented by Exp(B). Odd ratio is the probability of entrepreneurs to maintain or not maintain *SME's profitability* affected by independent variables. If the Exp(B) value is more than 1, it is called as risk factor. When it is less than 1 it is called as inhibitor factor.

1. Odd ratio value of entrepreneur's accounting background is 0,161. This phenomenon means that the opportunity of entrepreneurs who have accounting background will result 0,161 times to maintain *SME's profitability* compared to entrepreneurs who do not have any accounting background.
2. Preparation of financial statements and financial projections' odd ratio is 0,170 which means that the opportunity of entrepreneurs who prepare for at least balance sheet and income statement will result 77,573 times better to maintain *SME's profitability* compared to those who do not prepare both balance sheet and income statement.
3. The value less than 1 is also found in hiring accountant/bookkeeper. Its odd ratio is 0,170 which means that the opportunity of entrepreneurs who hires accountant/bookkeeper to manage finance or to help preparing financial reports will have 0,170 times in maintaining *SME's profitability* compared to those who do not hire accountant/bookkeeper.
4. Odd ratio of implementation of accounting information system is 1,104. It implies the opportunity of entrepreneurs who implement sophisticated accounting information system (using MYOB, Krishand, Quickbooks) will result 1,104 times better in maintaining *SME's profitability* than entrepreneurs using Microsoft Excel or manually.

4.6 Model Fit Test

Model fit test is conducted to test the null hypothesis which aimed to inform whether empirical data has been fit or not with the model. If there is compatibility between data and model, it can be recognized as fit. This test is measured by the value of *Hosmer and Lomeshow Goodness-of-fit test Statistic*. If the value > α (0,05), then logistic regression model is fit, thereupon can be used in this research.

Table 4.6 Hosmer and Lomeshow Test

Step	Chi-square	df	Sig.
1	2,020	7	0,959

Table 4.6 shows the significance value of 0,959 which is bigger than 0,05. It can be concluded that the logistic regression model is fit and accepted. *Chi-square* value is used to measure the difference between observation value and dependent variable prediction value which is the smaller the better. From the SPSS output shows the *Chi-Square* value of 2,020 and significance value of 0,959 which indicates null hypothesis can be accepted if it is lower than 0,05. Therefore, this test shows that the model is fit and accepted.

4.7 Accuracy Level Model

One of the main purposes of logistic regression is to determine the accuracy level from logistic regression analysis to classify the entrepreneurs whether able to maintain or not *SME's profitability*.

Table 4.7 Classification Model

	Observed		Predicted		
			Y		Percentage Correct
			Non-Maintan	Maintain	
Step 1	Y	Non Maintain	8	8	50
		Maintain	1	35	97,2
	Overall Percentage				82,7

In table 4.7, the accuracy level of logistic regression analysis in prediction is 82,7%. This model predicts that from 16 entrepreneurs that are initially uncapable of m*aintaining cashflow*, 8 of them will be able to maintain their cashflow and the other 8 are still uncapable of –maintaining their cashflow in the future. On the other hand, 36 entrepreneurs that initially are capable of maintaining their cashflow then decreases into only one entrepreneur while the others are still capable of maintaining their cashflow in the future.

4.8 Determination Coefficient Test (*NagelKerke R Square*)

The determination coefficient value of *NagelKerke R square* is to determine how big independent variables affect dependent variable.

Table 4.8 Determination Coefficient Test

Step	-2 Log Likelihood	NagelKerke R square
1	37,923[a]	0,559

Table 4.8 shows *NagelKerke R square* value of 0,559 meaning that independent variables have 55,9% impact towards dependent variable, while the remaining 44,1% is affected by other independent variables which are not included in this research.

4.9 Discussions

This section explains the impact of independent variables towards dependent variable as well as prior research, the theory, and logical implications.

4.9.1 Entrepreneur's Accounting Background Does Not Affect SME's Profitability

The result of this research found that *entrepreneur's accounting background* variable does not affect *SME's profitability*. In this research, one of the dimensions of *entrepreneur's accounting background* is work experience in the field of accounting/finance that evidently does not have any impact towards *SME's profitability*. This phenomenon is in line with a research conducted by Thiess et al. (2016) found that business success is determined from the diversity background of team members instead of specialization in only one field. Moreover, business success is not merely determined by entrepreneur's background but also motivation (Hechavarria et al., 2012) and prior business venture (Hopp and Sonderegger, 2014).

Other research suggests that an expertise in finance does not have any impact towards SME growth (Eke and Raath, 2013; Olawale and Garwe, 2010). A research by Vera-Munoz (1980) found that high accounting knowledge will hinder decision making in the right time because of too much considerations. In addition, an expertise in finance will not be used optimally in crisis by using the same strategy while in a secure condition it yields inconsistent findings (Minton et al., 2014). Custodio and Metzger (2014) discovered in their research that people at the top who have an expertise in finance will hold less cash and issue more debt, in consequence, cash flow tend to be negative.

This study, in particular, related to entrepreneur's accounting background is an empirical estimation without having guarantee to highest accuracy in the real world. In this case, entrepreneur's accounting background could beneficial for SMEs since the entrepreneur will likely to take less risky projects which lead to maintain profitability (Hoistash et al., 2016). Also, entrepreneur's accounting background are having more ability to consolidated firm information for decision making (Bushman and Smith, 2001).

4.9.2 Preparation of Financial Statements and Financial Projections Positively Affects SME's Profitability

This research reveals that *preparation of financial statements and financial projections* variable positively affects *SME's profitability*. More specifically, dimensions which give significant impact toward *SME's profitability* are *cash flow statement, balance sheet, income statement*, and *cost of capital analysis*.

The other two dimensions, *sales forecast* and *break-even analysis* do not have significant impact toward *SME's profitability*. Based on *Resource-Based Theory*, *preparation of financial statements and financial projections* is classified into tangible resources whereas financial report is classified as the output.

Several studies found that preparation of financial statements is the foundation of good decision making (Bonner, 1999; Meigs and Meigs, 1993; Miller et al., 2018). For instance, cash flow statements can be used for current cash condition, so that negative cash flow can be prevented. Indeed, accounting information such as financial statements improve information consolidation resulting in financial performance improvement (Bushman and Smith, 2001). In addition to that, they also examined that accounting information which can be differentiated into good or bad investments which later indirectly affects business performance. Another research by Alle and Yohn (2009) suggested that preparation of financial statements in SMEs is consistent with capital loan from external parties which result in increasing cash flow.

Cost of capital analysis includes the cost of debt and the cost of equity and is used by companies internally to judge whether a capital project is worth the expenditure of resources (Tran et al., 2017). Cost of capital depends on the mode of financing used, it refers to the cost of equity if the business issues shares or stocks. While the cost of debt if it is financed from debt such as bank loans. In this study, SMEs are not financed through equity, rather through debt. When implied in our setting, the cost of debt is defined as the interest rates paid by SMEs while borrowing from banks or other financial institutions.

4.9.3 *Hiring Accountant/Bookkeeper* Does Not Affect SME's Profitability

It is found in this research that *hiring accountant/bookkeeper* variable does not affect *SME's profitability*. This phenomenon has been predicted by Miller et al. (2018) suggesting that entrepreneurs who hire accountant/bookkeeper will view accounting as a compliance exercise. Consequently, the actual data is not integrated and inhibits decision making process objectively due to its rigidity (Child, 1974).

Several studies also suggested that financial statements made by accountant can only be beneficial if the entrepreneurs know the basic accounting principles (Miller et al., 2018) or only if the entrepreneurs have work experience and background in the field of accounting (Davila and Foster, 2005).

Besides, the presence of accountant is not an obligation and it tends to give an insignificant impact in the case of SMEs due to its limited transactions (Stanfield, 2009). A research by Lambrect and Pirnay (2005) found mixed results in hiring accountant towards SME's success and growth. Instead of hiring accountant/bookkeeper, it will be more useful for entrepreneurs to hire marketing professional to increase SME's growth and success (Wren and Storey, 2012).

Due to the exclusivity result of the respondent in this study, hiring accountant/bookkeeper could be the other way around. According to Bennett and Robson (1999), accountant's support could enhance business performance if the resources made by accountant is used as the basis of decision making. The gap between existing internal resources and resources required to achieve business success is likely to be the greatest in SMEs which could be supported by accountant (Johnson et al., 2007).

4.9.4. Implementation of Accounting Information System Does Not Affect SME's Profitability

The result of this research discovered that *implementation of accounting information system* variable does not affect *SME's profitability*. In information era, business success is not always determined by technology infrastructure (Scapens and Jazayeri, 2003), in this case is accounting information system. Other studies reveal drastic decrease in performance right after implementing technology because it needs several years after adopting such technology to be beneficial from it (Wah, 2000).

Naranjo-Gil (2004) also found that there is no direct relationship between SME's performance and accounting information system. There is a big chance of imitating from competitors, as a consequence, this only gives very limited benefits while at the same time increase in costs (Vitale, 1986) which decrease in cash flow.

In fact, it will hinder the performance since it is not utilized optimally (Davern and Kauffman, 2000; Mooney et al., 1996; Soh and Markus, 1995; Tallon et al., 2000).

CHAPTER 5

CLOSING REMARKS

5.1 Conclusion

The results of this research regarding independent variables such as entrepreneur's accounting background, preparation of financial statements and financial projections, hiring accountant/bookkeeper, and implementation of accounting information system towards dependent variable SME's profitability are described as follows. Entrepreneur's accounting background variable does not affect dependent variable. While preparation of financial statements and financial projections variable positively affects dependent variable. More specifically, there are six dimensions of preparation financial statements and financial projections variable such as cash flow statement, balance sheet, income statement, sales forecast, break-even analysis, and cost of capital analysis. Meanwhile, there are only four dimensions affecting dependent variable, which are cash-flow statement, balance sheet, income statement and cost of capital analysis. Both hiring accountant/bookkeeper variable and implementation of accounting information system variable do not affect dependent variable.

5.2 Research Limitations

Given the complexity of this subject, there are several limitations in this current research, which are 1) Since the total member of HIPMI Jatim is 105 people, 75 of them are able to fill the questionnaires. From 75 respondents, there are only 52 can be processed further. This only represents less than 50% from total populations; 2) Limited number of periods used in this research is determined by the ability of entrepreneurs to *maintain positive cash flow for three consecutive periods*. Therefore, to determine if the SME is profitable or not, this research is judging on the performance for only three periods. This short-term period does not always represent the real condition of the business performance especially when the business has already run for several years.

5.3 Suggestions for Future Research

Given the limitation above, several suggestions are provided for the future researchers who will carry out similar topics of research. The suggestions are 1) Although the members of HIPMI Jatim have various business sectors, it is expected for future researchers to conduct a similar topic of research by expanding the respondents into wider area or other communities. This will shed more insights on the effect of accounting on SME's profitability and provides more appealing evidences to current literature regarding their association; 2) It is also expected for future researchers to judge SME's profitability based on the time the business has run. By providing this flexible judgment, the results will actually be more representative picturing real condition of the business rather than judging all SMEs based on only specific period of time.

REFERENCES

Allee, K.D., Yohn, T.L. 2009. The Demand for Financial Statements in an Unregulated Environment: An Examination of the Production and Use of Financial Statements byPrivately Held Small Businesses. *The Accounting Review* 84 (1): 1-25.

Amoako, G. K. 2013. Accounting Practices of SMEs: A Case Study of Kumasi Metropolis in Ghana. *International Journal of Business and Management*8(24): 73.

Bain, J. S. 1959. *Industrial organization*. New York: Wiley

Barney, J. 1986. Strategic factor markets: Expectations, luck, and business strategy.*Management Science* 32 (1): 1231-1241.

Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*17 (2): 771-792.

Bennett, R.J. and Robson, P.J.A. 2005. The Advisor-SME Client Relationship: Impact, Satisfaction and Commitment.*Small Business Economics*25 (3): 255-271.

Berry, A., Rodriguez, E. and Sandee, H. 2001. Small and Medium Enterprise Dynamics in Indonesia.*Bulletin of Indonesian Economic Studies*37(3): 363-384.

Bharadwaj A.S. 2000. A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation. *MIS Quarterly* 24 (3): 169-196.

Bharadwaj, A.S., Bharadwaj, S.G. andKonsynski, B.R. 1999. Information Technology Effects on Firm Performance as Measured by Tobin´s Q.*Management Science* 45 (7): 1008-1024.

Biryabarema, E. 1998. *Small Scale Business and Commercial Banks in Uganda*. Kampala: Makerere University Press

Bonner, S. 1999. Judgement and Decision-Making Research in Accounting.*Accounting Horizons* 13 (4): 385-398.

Buffet, W. 2003. *Address to the Students at the University of Nebraska at Lincoln in the Fall of 2003: .Institute of Management Accountants Newsletter*, http://www.swflima.org/Newsletters/SWFL%20IMA%20NEWSLETTER%20MAR%202010.pdf.March 2018

Bushman, R., Smith, A. 2001. Financial accounting information and corporate governance.*Journal of Accounting and Economics* 32 (4): 237-333.

Carey, P. J. 2015. External accountants' business advice and SME performance.*Pacific Accounting Review* 27 (2): 166-188.

Cassar, G. 2009. Financial Statement and Projection Preparation in Start-Up Ventures.*The Accounting Review* 84(1): 27-51.

Cassar, G. 2010. Are Individuals Entering Self-Employment Overly Optimistic? An Empirical Test of Plans and Projections on Nascent Entrepreneur Expectations. *Strategic Management Review* 31: 822-840.

Child, J. 1974. Management and Organizational Factors Associated with Company Performance – Part I. *Journal of Management Studies* 35 (1):175-189.

Collis, J. and Jarvis, R. 2002. Financial Information and The Management of Small Private Companies.*Journal of Small Business and Enterprise Development* 9 (2): 100-110.

Copeland, R. M., AND Dascher, P. E. 1978. *Managerial Accounting*. New York: John Wiley.

Cramm, S. 2008. Smaller IT Budget? Pursue Value Driven Development.*Harvard Business Review-Voices*. November 20.

Davem, M.J., and Kauffman, R.L 2000. Discovering Potential and Realizing Value from Information Technology Investments. *Journal of Management Information Systems* 16 (4): 121-144.

Davila, A, and G. Foster. 2005. Management Accounting Systems Adoption Decisions: Evidence and Performance Implications from Early-Stage/Startup Companies. *The Accounting Review* 80 (2):1039-1068.

Deakins, D., Logan, D. and Steele, L. 2001. The financial management of the small enterprise, *ACCA Research Report No. 64. The Association of Chartered Certified Accountants,Certified Accountants Educational Trust.*London.

Defond, M., Hann, R. and Hu, X. 2005. Does the Market Value Financial Expertise on Audit Committees of Boards of Directors?.*Journal of Accounting Research* 43 (2): 153-193.

Dodge, H., Fullerton, S. and Robbins, J. 1994. Stage of The Organizational Life Cycle and Competition as Mediators of Problem Perception for Small Businesses. *Strategic Management Journal*15 (3): 121–134.

Ediraras, D. T. 2011. Akuntansi dan Kinerja UKM. *Jurnal Ilmiah Ekonomi Bisnis*, *15*(2): 12-20.

El Louadi, M. 1998. The Relationship Among Organisation Structure, Information Technology and Information Processing in Small Canadian Firms.*Canadian Journal of Administrative Science* 15 (2): 99-180.

Garrison, R., Noreen, E. and Brewer, P. 2017. *Managerial Accounting* 16th Edition: McGraw-Hill Education.

Gompers, P., Kovner, A., Lerner, J. and Scharfstein, D. 2010. Performance Persistence in Entrepreneurship.*Journal of Financial Economics*96 (1): 18-32.

Grant, R.M. 1991. The Resource-Based Theory of Competitive Advantage: Implications for StrategyFormulation. *California Management Review*33(3):114-135.

Hamdani, J., and Wirawan, C. 2012. Open Innovation Implementation to Sustain Indonesian SMEs. *Procedia Economics and Finance*4 (1): 223-233.

Hamel, G. 1994. *The concept of core competence: Competence-Based Competition. Chichester, UK*. John Wiley & Sons, Inc. USA.

Hechavarria, D., Renko, M. and Matthews C. 2012. The Nascent Entrepreneurship Hub: Goals, Entrepreneurial Self-Efficacy, and Start-Up Outcomes.*Small Business Economics* 39 (3): 685-702.

Hoitash, R., Hoitash U. and Kurt A. 2016. Do Accountants Make Better Chief Financial Officers?.*Journal of Accounting and Economics*61(2-3): 414-432.

Hopp, C. and Sonderegger, R. 2014.Understanding the Dynamics of Nascent Entrepreneurship – Prestart-up Experience, Intentions, and Entrepreneurial Success.*Journal of Small Business Management* 53 (4): 1076-1096.

Horngren, C., Datar, S. and Rajan, M. 2015. *Cost Accounting a Managerial Emphasis* 15th Edition: Prentice Hall.

Indonesian Statistical Center Office. 2014. *BPS Akui Kemiskinan di Indonesia Semakin Dalam dan Parah*, finance.detik.com.

Irjayanti, M., Azis, A. M. and Sari, P. A. 2018. *Indonesian SMEs Readiness For ASEAN Economic Community*. Doctoral Dissertation National Academy of Management Ukraine.

Jennings, P. and Beaver, G. 1997. The Performance and Competitive Advantage Of Small Firms: A Management Perspective.*International Small Business Journal* 15 (2): 63-75.

Johnson, S., Webber, D.J. and Thomas, W. 2007. Which Smes Use External Business Advice? A Multivariate Subregional Study.*Environment and Planning* 39 (8): 1981-1997.

Liedholm, Carl, and Donald Mead. 1999.*Small Enterprises and Economic Development:The Dynamic Role of Micro and SmallEnterprises* , Routledge, London.

Lisowsky, P., Minnis, P. and Sutherland, A. 2018. Economic Growth and Financial Statement Verification. *Journal of Accounting Research.* Forthcoming.

Makadok, R. 2001. Toward A Synthesis of The Resource-Based and Dynamic-Capability Views of Rent Creation. *Strategic Management Journal*22*(*5): 387-401.

Margaretha, F. and Supartika, N. 2016. Factors Affecting Profitability of Small Medium Enterprises (SMEs) Firm Listed in Indonesia Stock Exchange. *Journal of Economics, Business and Management*4(2): 132-137.

Maroto J. A. 2008. Las PYME españolas con forma societaria, Ministerio de Industria. *Turismo y Comercio*. Madrid.

McMahon, R. G. P. and Holmes, S. 1991. Small Business Financial Management Practices in North America: A Literature Review. *Journal of Small Business Management*: 19–29.

Meigs, R. and Meigs W. 1993. *Accounting, the basis for business decisions.* New York:McGraw-Hill.

Minnis, M. 2011. The Value of Financial Statement Verification in Debt Financing: Evidence from Private U.S. Firms. *Journal of Accounting Research* 49 (2): 457-506.

Minnis, M. and Sutherland, A. 2017. Financial Statements as Monitoring Mechanisms: Evidence from Small Commercial Loans.*Journal of Accounting Research.* 55 (1): 197-233.

Minton, B., Taillard, J. and Williamson, R. 2014. Financial Expertise of the Board, Risk Taking, and Performance: Evidence from Bank Holding Companies.*Journal of Financial and QuantitativeAnalysis* 49 (2): 351-380.

Mooney, J.G., Gurbaxani, V. and Kraemer, K.L. 1996. A Process-Oriented Framework for Assessing the Business Value of Information Technology. *Data Base for Advances in InformationSystems* 27:68-81.

Muhindo, A., Mzuzu, K., Maureen. and Zhou,J. 2014. Impact of Accounting Information Systems on Profitability of Small Scale Businesses: A Case of Kampala City in Uganda. International.*Journal of Academic Research in Management*.Vol.3. ISSN: 2296-1747.

Naranjo-Gil, D. 2004. The Role of Sophisticated Accounting System in Strategy Management.*The International Journal of Digital Accounting Research* 4(8): 125-144.

OECD.2005. *OECD SME and Entrepreneurship Outlook, Paris. p. 17*.

Ofonagoro, A. O. 1983. September 30 Need for Financial Statement in Small Business. *Business Times* 22(1): 10-15.

Olawale, F. and Garwe, D. 2010. Obstacles to the Growth of New SMEs in South Africa: A Principal Component Analysis Approach. *Journal of Business Management 4 (5*): 728-729.

Pelham A.M. 1985. *Small business consulting needs and opinions of consultants*. Small Business Institute Directors Association. Iowa: University of Northern Iowa.

Peng, C., Lee, K. and Ingersoll, G. 2002. An Introduction to Logistic Regression Analysis and Reporting. *The Journal of Educational Research* 96(1): 3-14.

Porter, M. E. 1980. *Competitive Strategy*. New York: Free Press.

Powell, T.C., and Dent-Micallef, A. 1997. Information Technology As Competitive Advantage: The Role of Human, Business, and Technology Resources. *Strategic Management Journal* 18 (5): 375-405.

Prahalad, C. K. and Hamel, G. 1990. The Core Competence of the Corporation. *Harvard Business Review*68(3): 79-91.

Sulistyastuti, D. R. 2004. Dinamika Usaha Kecil dan Menengah (UKM). Analisis Konsentrasi Regional UKM di Indonesia 1999 – 2001. 9.

Russo, M. and Fouts, P. 1997. A Resource-Based Perspective on Corporate Environmental Performance and Profitability. *The Academy of Management Journal* 40(3): 534-559.

Setyawan, A.,Isa, M., Wajdi, F., Syamsudin and Permono, S. N. 2015. An Assessment of SME Competitiveness in Indonesia. *Journal of Competitiveness* 7 (3): 60-74.

Scapens, R., Jazayeri, M. and Scapens, J. 1998. SAP: integrated Information Systems and the Implications for Management Accountants.*Management Accounting Research 76 (8): 46-48.*

Scapens, R. and Jazayeri, M. 2003. ERP Systems and Management Accounting Change: Opportunities or Impacts? A Research Note.*European Accounting Review*12 (1): 201-233.

Soudani, S. N. 2012. The Usefulness of An Accounting Information System for Effective Organizational Performance. *International Journal of Economics and Finance*.Vol.4, No. 5

Tagoe, N., Anuwa-Amarh, E. and Nyarko, E. 2008. SME Access to Bank Finance in An Emerging Economy: The Role of Information Management Practices. *International Journal of Financial Services Management*3(2): 148–170.

Tallon, P. P., Kraemer, K. L. and Gurbaxani, V. 2000. Executives' Perceptions and BusinessValue of Information Technology: A Process-Oriented Approach. *Journal of Management Information Systems* 16(4): 145-174.

Tran H., Abbott M. and Chee J.Y. 2017. How Does Working Capital Management Affect The Profitability Of Vietnamese Small- And Medium-Sized Enterprises?. *Journal of Small Business and Enterprise Development 24 (1): 2-11*.

Tambunan, T. 2009. Export-oriented small and medium industry clusters in Indonesia.*Journal of Enterprising Communities: People and Places in the Global Economy* 3 (1): 25-58.

Tambunan, T. 2011. Development of Small and Medium Enterprises in A Developing Country: The Indonesian Case.*Journal of Enterprising Communities: People and Places in the Global Economy 5 (1): 68-83.*

Thiess, D., Siern, C. and Grichnik, D. 2016. How Does Heterogeneity in Experience

Influence the Performance of Nascent Venture Teams? Insights from the US PSED II Study. *Journal of Business Venturing Insights*5(2): 55-62.

Urata, S. 2000. Policy Recommendations for SME Promotion in The Republic of Indonesia.*Report of JICA Senior Advisor to Coordinating Minister of Economy, Finance, and Industry*. Tokyo.

Van De Ven A. H. and Drazin, R. 1985. The Concept of Fit in Contingency Theory.*Resources Organizational Behaviour*7(1): 65-333.

Vera-Munoz, S. 1998. The Effects of Accounting Knowledge and Context on the Omission of Opportunity Costs in Resource Allocation Decisions.*The Accounting Review*73 (1): 47-72.

Wernerfelt, B. 1984. A Resource-Based View of The Firm. *Strategic Management Journal*5 (1): 171-180.

Wren C. and Storey D.J. 2002. Evaluating the Effect of Soft Business Support Upon Small Firm Performance.*Oxford Economic Papers* 54(2):334-365.